

Main program.

[called by: .]

[calls: [initial](#), [rdsurf](#), [rdcoils](#), [saving](#), [solvers](#)].

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### 0.1 Brief introduction

This code is used for designing 3-D coils in stellarators, knotrans and tokamaks. FOCUS (Finding/Flexible Optimized Coils Using Space curves) gets rid of winding surface by representing coils using space curves (either Fundamental theorem of space curves or Fourier series or other representations.). And for the first time, the derivatives (both the first and the second ones) are analytically calculated.

For more information, please visit [czhu@pppl.gov](mailto:czhu@pppl.gov) (or [zcxiang@mail.ustc.edu.cn](mailto:zcxiang@mail.ustc.edu.cn)).

### 0.2 How to execute

A brief help message will be printed if you just type ‘xfocus –help’

### 0.3 Misc

- Details about the macros used are listed in *Macros*;
- The unit used in FOCUS is the International System of Units (SI);
- All the shared variables are defined in [globals](#);
- Variables starting with **case\_** are used for controlling the flow direction;
- Variables starting with **Is** are used for logical judgement.

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focus.h last modified on 19-04-23 10:22:51.7;

[Focus subroutines](#);

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